

WHAT IS CLAIMED IS:

1. A toroidal-type continuously variable transmission, comprising:

an input shaft;

5 an input disk and an output disk, which are supported mutually concentrically with said input shaft and mutually independently rotatably;

a power roller sandwiched between said input disk and said output disk;

10 a power roller bearing for rotatably supporting said power roller;

an oil passage for leading lubricating oil to said power roller bearing; and

15 a foreign substance trapping member provided in the oil passage, wherein the trapping member comprises at least one of a mesh filter and a magnet member provided in said oil passage.

2. The toroidal-type continuously variable transmission according to claim 1, further comprising:

20 a seal member provided on an outer peripheral surface of said power roller bearing.

3. The toroidal-type continuously variable transmission according to claim 1,

25 wherein said power roller bearing has an inner ring and an

outer ring, and wherein said trapping member is disposed between said inner ring and said outer ring.

4. A toroidal-type continuously variable transmission, in
5 which lubricating oil is supplied from an oil pump having a line filter, comprising:

an input shaft;

an input disk and an output disk, which are supported mutually
concentrically with said input shaft and mutually independently
10 rotatably;

at least one pair of trunnions each having a pivot shaft
disposed at a position perpendicular to directions of center axes
of said input disk and said output disk and each adapted to tiltedly
rotate around said pivot shaft;

15 a power roller sandwiched between said input disk and said output disk;

a power roller bearing for rotatably supporting said power roller;

a lubricating oil passage for supplying lubricating oil from
20 said line filter to said power roller bearing; and

a foreign substance trapping member provided in the oil passage, wherein the trapping member comprises at least one of a mesh filter and a magnet member provided in said oil passage.

25 5. The toroidal-type continuously variable transmission

according to claim 4, further comprising:

a seal member provided on an outer peripheral surface of said power roller bearing.

5 6. The toroidal-type continuously variable transmission according to claim 4, wherein each of said trunnions has a shaft at a bottom thereof, and wherein said trapping member is disposed in said shaft provided at the bottom of each of said trunnions.

10 7. The toroidal-type continuously variable transmission according to claim 4, further comprising:

a displacement shaft projecting from an inner surface of each of said trunnions, wherein said oil passage include an oil hole provided in the displacement shaft, and

15 wherein said power roller bearing has an inner ring and an outer ring, said outer ring and said displacement shaft are integrally provided, and said trapping member is disposed in the oil hole of each of said displacement shafts.

20 8. The toroidal-type continuously variable transmission according to claim 7, comprising:

a thrust bearing disposed between said outer ring of said power roller bearing and each of said trunnions; and

a seal member, provided on an outer peripheral portion of
25 said thrust bearing.

9. The toroidal-type continuously variable transmission according to claim 4, further comprising:

5 a valve body including an upper valve body and a lower valve body, provided under said input disk and said output disk, wherein an oil passage for supplying lubricating oil to said power roller bearing is provided in said lower valve body, and wherein the trapping member is provided in said oil passage of said lower valve body.

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10. The toroidal-type continuously variable transmission according to claim 4, wherein each of said trunnions has a drive rod provided at a bottom thereof, wherein an oil passage for supplying lubricating oil to said power roller bearing is provided
15 in each of said drive rods, and wherein the trapping member is provided in said oil passage of each of said drive rods.

11. The toroidal-type continuously variable transmission according to claim 4, wherein each of said trunnions has an oil
20 passage for supplying lubricating oil to said power roller bearing, and wherein a foreign substance trap member is provided in said oil passage of each of said trunnions, wherein said trap member comprises at least one of a mesh filter and a magnetic member.

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12. The toroidal-type continuously variable transmission

according to claim 4, further comprising:

a displacement shaft projecting from an inner surface of each of said trunnions, wherein the oil passage includes a cavity portion provided in said displacement shaft, and

5 wherein a foreign substance trap member is provided in said cavity portion of said displacement shaft, and wherein said trap member comprises at least one of a mesh filter and a magnetic member.

10 13. A toroidal-type continuously variable transmission, comprising:

an input shaft;

an input disk and an output disk, which are supported mutually concentrically with said input shaft and mutually independently
15 rotatably;

a power roller sandwiched between said input disk and said output disk;

a power roller bearing for rotatably supporting said power roller;

20 an oil passage means for leading lubricating oil to said power roller bearing; and

a trapping means for trapping a foreign substance in the oil passage means.

25 14. The toroidal-type continuously variable transmission

according to claim 13, wherein the trapping means comprises at least one of a mesh filter and a magnet member.

15. A toroidal-type continuously variable transmission,
5 in which lubricating oil is supplied from an oil pump having a line filter, comprising:

an input shaft;

an input disk and an output disk, which are supported mutually
concentrically with said input shaft and mutually independently
10 rotatably;

at least one pair of trunnions each having a pivot shaft
disposed at a position perpendicular to directions of center axes
of said input disk and said output disk and each adapted to tiltedly
rotate around said pivot shaft;

15 a power roller sandwiched between said input disk and said output disk;

a power roller bearing for rotatably supporting said power roller;

a lubricating oil supplying means for supplying lubricating
20 oil from said line filter to said power roller bearing; and

a trapping means provided in the oil supplying means for trapping a foreign substance.

16. The toroidal-type continuously variable transmission
25 according to claim 15, wherein the trapping means comprises at

least one of a mesh filter and a magnet member.